"presumption of validity attaching to the Patent Office adjudications" (R. 43), but the Circuit Court erred also in following the holding of the District Court that there had actually been "a trial de novo" where the trial "de novo" had, in fact, adopted "the presumption of validity attaching to the Patent Office adjudications" as grounds for its judgment.

We respectfully submit that Congress did not intend the presumption to take the place of evidence submitted by the Patent Office and did not intend to prevent confrontation of witnesses and prevent its examiners or technicians from being examined and cross-examined, from which testimony the court could judge whether the hidden and unknown examiners, reportedly working on small salaries, had made a correct determination. It is submitted that Congress meant a trial "de novo" to mean exactly what the words mean, namely, a *whole new trial,* with witnesses produced for the court to hear and examine, and the parties to have the right to examine and cross-examine.

The respondent cited Revised Statute 4915 and *Morgan v. Daniels,* 153 U.S. 120, 14 S.Ct. 772, 38 L.ed. 657, an 1894 case. However, Section 4915, Revised Statutes, did not contain the words "trial de novo" which have well established legal meaning and which mean a complete new trial, without presumptions, and in which the presumptions disappear when testimony is offered.

Morgan v. Daniels also is distinguishable by the fact that in that case unlike the present one the Patent Office had granted a patent and it was an *interference* case wherein Fred H. Daniels claimed to be the original, sole and first inventor of an improvement in machines for coiling wires or wire rods. It appears in that case that conflicting views were reached by different examiners

as well as by the examiners in chief and by the Commissioner of Patents, who reversed the judgment of the examiners in chief. That case was "submitted without any additional testimony to the Circuit Court".

In the case at bar, not only was testimony offered by the petitioner, but it was unrebutted by the Patent Office and the Patent Office did not submit its technicians for examination and cross-examination, a basic requirement of due process of law guaranteed by the Fifth Amendment U. S. Constitution. We respectfully submit that in amending and revising Statute 4915 into 35 U.S. Codes Sections 145 and 146, Congress had intended an entirely new trial "de novo".

35 U.S. Codes Section 145 makes no provision for the admission of any Patent Office record and makes no provision as to the effect of the record in the Patent Office. On the contrary, it provides that the court shall make its judgment "as the facts *in the case* may appear." Thus, to give the same presumptive evidentiary effect in a Section 145 proceeding as in a Section 146 proceeding, despite the absence of any similar foundation as to the Patent Office record, is to disregard the critical distinguishable features of a determination in the Patent Office in an ex parte hearing and a determination after an adversary proceeding.

It is especially incongruous, arbitrary and unreasonable to apply such a rule where *new* evidence is presented in the trial de novo. As noted in *Standard Oil Development Co. v. Marzall*, 86 App. D.C. 210, 181 F.2d 280:

> "We cannot in reason say with certainty that the Patent Office would have decided as it did had this additional evidence been before it. The trial in the District Court was de novo, as contemplated by re-

vised statute, 35 U.S.C. Section 63 (1946), 35 U.S.C.A. section 63. While ordinarily the record in the court will no doubt be quite similar to that in the Patent Office proceedings, see Globe Union, Inc. v. Chicago Telephone Supply Co., 7th Cir. 1939, 103 F.2d 722, 727, it need not be the same and it was not in this case."

Thus, for these reasons, the Circuit Court said:

"In so deciding, we do not give to the decision of the Patent Office the weight to which it would be entitled if its rejection of the claims had been made on the same facts as were before the District Court."

The standard of *Morgan v. Daniels, supra,* an adversary proceeding, should not be and is not applicable to an ex parte determination by the Patent Office. The ancient (1894) case of *Morgan v. Daniels* test is particularly inapplicable where new evidence is presented. To impose an almost conclusive presumption after a proceeding in which a litigant is denied the fundamental requirements of a fair hearing is a violation of the due process provisions of the Constitution of the United States, which read as follows:

"No person shall be . . . deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation."

The history of earthquakes throughout the United States and throughout the world was not considered by the Patent Office in determining the patent application here, fulfilling as it does an unsupplied need. The examiners here made no mention of the prior art as fulfilling this need, nor has the construction placed upon the prior art by municipalities been given the weight to which it is entitled. Of course, counsel could not bring these

facts out on examination or cross-examination of the Patent Office examiners as they were not called or put on the stand.

California has been peculiarly the victim of massive earthquakes. San Francisco was hit by a disastrous earthquake on the morning of April 8, 1906. Long Beach and its surrounding areas have also been hit with terrific earthquakes. Set out in the appendix hereto are some photographs of earthquakes in California, a U.S. Geological Survey Map with Master Fault Rifts of Southern California, a Geomorphic Map of California, and a summary of some of the world's major earthquakes. To protect against these conditions, the cities of California have adopted building codes with which to protect structures in this earthquake country.

As said by R.T. Hill in his book published by the Southern California Academy of Sciences, entitled *Southern California Geology and Los Angeles Earthquakes*, "Experiences of the past show that no moderately well constructed building has ever been destroyed by earthquakes in Southern California." It is to meet such a construction as required and approved by the cities that the Pollack and Adams patents have been devised and are being carried out commercially successful because of this situation. No prior art reaches these conditions.

In their excellent book *Geology Principles and Processes*, by William H. Emmons, George A. Thiel, Professor of Geology, University of Minnesota, Clinton R. Stauffer, Professor Emeritus of Geology, University of Minnesota and Research Associate, California Institute of Technology, and Ira S. Allison, Professor of Geology, Oregon State College, it is stated:

"Examinations of ruins of the San Francisco earthquake of 1906 showed that many of the bricks had been

laid dry in mortar. They were poorly bonded and had clean surfaces, and the mortar showed little adhesion. Walls laid in cement with wet brick stood the test of the earthquake better. Reinforced-concrete buildings have proved relatively stable, but wood, steel, and reinforced-masonry structures can be earthquake-resistant if well-designed and well-built, with the use of adequate reinforcements and appropriate ties, bracing, struts, and anchor bolts. The most secure structure is one that will move as a unit." (p. 558)

Pollack and Adams' aim was to meet this need for walls that would be earthquake resistant. Their wall is unique in that all materials work as a unit. The brick, steel, and concrete, in the right proportion and in the right scheme, reinforce each other. This becomes patentable. Their wall will "move as a unit" and when pushed, every element of the wall works in its best relationship to carry the load.

The work of Pollack and Adams meets the requirements which earthquakes, particularly the San Francisco earthquake, showed had not been met by other construction methods. They are therefore entitled to a patent for the development which cities throughout earthquake-State California have found meets their community standards.

On Columbus Day, October 12, 1965, Yale University published a map, stating that Leif Ericson had discovered America possibly 1000 years before Columbus. In commenting on this announcement, Eric Severeid, Columbia Broadcasting commentator, stated that Leif Ericson reportedly discovered America a thousand years before Columbus and did nothing about it. Columbus discovered America and opened up an entire new world.

We think the analogy may well apply to patents. The Patent Office says that there were three earlier patents,

the Hild patent, the Simms patent and the Betzler patent. But nobody did anything about it, at least nothing was done to apply them to earthquake country and the important needs in lands affected by severe earthquakes. Pollack and Adams discovered a way of building grouts highly useful and protective in earthquake country. Cities have adopted ordinances and regulations approving their method and requiring their type of construction in earthquake country. Surely the spark of genius which enabled them to comply with this great need should be protected by a patent and should not be obscured by alleged earlier references which did not fill the need and were not meant to reach this requirement.

Attention of the Court is also called to the fact that a similar question is raised by *Goodyear Tire and Rubber Co. et al. v. Commissioner of Patents,* No. 601, which is now pending before the Court.

We respectfully pray for certiorari and for an order overruling the Commissioner of Patents, and an order directing that the patents be issued to Sheldon L. Pollack and Max E. Adams as prayed for.

Respectfully submitted,

MORRIS LAVINE

Attorney for Petitioners

U.S. Geological Survey Map with Master Fault Rifts of Southern California

Geomorphic Map of California

EARTHQUAKES

Lisbon, 1755. On All Saints' Day, November 1, 1755, thousands of persons were congregated in the cathedrals of Lisbon, Portugal, when at 9:40 a.m. the city was struck by a violent earthquake, 6 or 7 minutes long, that virtually destroyed the churches and other buildings of the city and killed tens of thousands.

New Madrid, 1811-1812. A little after 2 a.m. on December 16, 1811, a major earthquake struck the region of New Madrid, Missouri. There followed 27 aftershocks before dawn and a declining series of shocks for days afterward. On January 23, 1813, a second great temblor struck, and on February 7, 1812, a third rocked the area the most severely of all. In 3 months' time a total of 1,874 shocks was noted at Louisville, Kentucky, 200 miles away. Chimneys were toppled in Cincinnati, Ohio, 400 miles away.

Charleston, 1886. On August 31, 1886, a violent earthquake shook the city of Charleston, South Carolina, for about 70 seconds. Buildings on filled-in ground were heavily damaged, roads and railroads were twisted about, air and water spurted out of the ground, and sand mounds were built up at many places. The earthquake was felt over most of the eastern part of the United States, from Boston to Milwaukee to New Orleans.

Assam, 1897. At about 5:15 p.m., June 12, 1897, an earthquake severely shook the region of the province of Assam in eastern India. Inasmuch as damage to buildings was almost total over an area of about 30,000 square miles and the acceleration was great enough to overcome gravity and project stones vertically off the ground, this earthquake may be the most severe one known, although only a moderate number of persons were killed.

California Earthquake. On April 18, 1906, California was shaken by the most severe earthquake in the history of the state. About 700 persons were killed, buildings were destroyed, and in a fire that followed the earthquake, a large part of San Francisco was burned. Piers in harbors nearby were destroyed, and landslides occurred. The first snap, or movement, of the earth was recorded at the observatory of the University of California and was found to be 3 inches in a horizontal and 1 inch in a vertical direction. Quickly following the first snap were rebounds over the greatly disturbed area on both sides of a fault line. These movements, or "temblors", brought down chimneys and towers. The shocks were felt from Coos Bay, Oregon, to Los Angeles and were recorded at Washington, D. C.; at Potsdam, Germany; Irkutsk, Siberia; and other places. The San Andreas fault that caused the California earthquake is approximately vertical, and the movement along it was approximately horizontal.

Sagami Bay. On September 1, 1923, a great earthquake destroyed Yokohama and a large part of Tokyo, Japan. At 11.58:44 a.m. a violent shock shook the houses and other structures.

Long Beach, California. At Long Beach, California, there was a shock March 10, 1933. At short distances away it was not a strong shock as recorded by seismographs, but it was severe locally, and since there is deep alluvium over much of the area, there was heavy damage and some loss of life. The point of origin was a little offshore. There was no sea wave and no notable disturbance of water, although vessels nearby felt the tremors.

Helena, Montana. Some earthquakes consist of a large number of small shocks. These are *swarm earthquakes.* At Helena, Montana, from October 18, 1935, to January

1, 1936, there were nearly 1,300 shocks; strong shocks on October 18, November 28, and December 31 were destructive. Forty houses were ruined, 200 considerably damaged, and 80 per cent of the houses in the city suffered some damage. In mines nearby the shock was felt strongly, but no damage was done to them.

Arvin-Tehachapi, California. The strongest California earthquake since 1906 struck the Arvin-Tehachapi area at the south end of the San Joaquin Valley, California, on July 21, 1952. It had a maximum intensity of XI, but only 14 lives were lost, as the area is thinly settled.

Orleansville, Algeria. About 1:07 a.m., September 9, 1954, a severe earthquake occurred at Orleansville, in northern Algeria, wrecking much of the city and killing more than a thousand of the 32,500 population. The earth fractured, and open fissures appeared for 60 miles around.

Other Earthquakes. References to earthquakes appear in ancient and medieval writings of Greece, Italy, and other countries, as well as in modern records. It has been estimated that in 10 great shocks since A.D. 1000 more than 1½ million persons have lost their lives and that in 4,000 years more than 13 million persons have been killed.